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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,588	12/28/2004	Mary-Luc Champel	PF020077	3084

24498 7590 02/24/2009

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EXAMINER	
ISOM, JOHN W	

ART UNIT	PAPER NUMBER
2447	

MAIL DATE	DELIVERY MODE
02/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/519,588	CHAMPEL ET AL.	
	Examiner	Art Unit	
	John Isom	2447	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 December 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/28/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-10 are pending.

Claim Objections

2. Claims 1-10 are objected to because of the following informalities:

- Please amend claim 1 as follows:

  "A procedure for generating an address value for a communication terminal linked to a network, the procedure ~~being wherein it comprises~~ comprising the following steps, at terminal level:

  a) scanning of messages sent over the network; ~~and~~

  b) ~~reception of~~ receiving a message interchanged between two terminals already configured comprising a pair of first and second address values[[,]];

  [[b]] c) ~~determination of~~ determining a characteristic value of the network, said value being contained in the first and the second address values[[,]];

  [[c]] d) ~~calculation of~~ calculating a third address value containing the characteristic value of the network[[,]]; and

  [[d]] e) ~~assignment of~~ assigning the third address value to the communication terminal if ~~this~~ the third address value is not already assigned to another terminal."

- Please amend claim 2 as follows:

  "~~Procedure~~ The procedure for generating an address value as claimed in claim 1, wherein if the communication terminal deduces from the call captured on the communication network that the second address value is available,

then the ~~calculation~~ calculating step consists in giving to the third address value the value of the second address value."

- Line 3 of claim 2 must be further amended because the limitation "the communication network" lacks antecedent basis.
- Please amend claim 3 as follows:

  "The procedure for generating an address value as claimed in claim 1, wherein ~~the third value is calculated by~~ said calculating a third address value comprises concatenating the characteristic value of the network with a specific value, ~~this~~ the specific value being maximum on ~~the~~ a first calculation, ~~this~~ the specific value being reduced by one unit each time that the preceding third value calculated is found to be assigned to said another terminal."
- Line 5 of claim 3 must be further amended because the limitation "unit" is indefinite and lacks antecedent basis.
- Line 5 of claim 3 must be further amended because the limitation "the preceding third value calculated" lacks antecedent basis.
- Please amend claim 4 as follows:

  "The procedure for generating an address value as claimed in claim 3, ~~wherein it comprises~~ further comprising: ~~a step consisting in~~ changing the value of the least significant bit of the characteristic value of the network, the new-characteristic value being reduced by this bit, said ~~step~~ changing being triggered when all the third values calculated from the preceding characteristic value of the network are already assigned to a terminal."

- Line 3 of claim 4 must be further amended because the limitation “the value of the least significant bit” lacks antecedent basis.
- Line 4 of claim 4 must be further amended because the limitation “the new-characteristic value” lacks antecedent basis.
- Line 4 of claim 4 must be further amended because the limitation “this bit” lacks antecedent basis.
- Line 5 of claim 4 must be further amended because the limitation “all the third values calculated” lacks antecedent basis.
- Line 5 of claim 4 must be further amended because the limitation “the preceding characteristic value” lacks antecedent basis.
- Line 6 of claim 4 must be further amended because the limitation “a terminal” has ambiguous antecedent basis.
- In line 5 of claim 5, please amend “assignment” to “~~assignment~~ assigning”.
- Please amend claim 6 as follows:

  “The procedure for generating an address value as claimed in claim 1, wherein the ~~assignment~~ assigning step comprises a step for sending a communication request to a terminal having the third address value, and a step for receiving a message sent by the network following said communication request indicating that the third address value is not assigned to a terminal of the network, the step for receiving ~~such~~ a message triggering the ~~assignment of~~ assigning the third address value to the communication terminal.”

- Lines 5-6 of claim 6 must be further amended because the limitation "a terminal of the network" lacks antecedent basis.
- Please amend claim 7 as follows:

  "An electronic device designed to be connected to a communication network, comprising:

  a means of bidirectional communication with said communication network[[,]]; ~~wherein it comprises~~ a means of receiving all ~~the~~ messages sent over the communication network in order to select a message interchanged between two terminals already configured, said message interchanged comprising a first and a second address value[[,]]; and

  a means for determining a characteristic value of the communication network which constitutes a part of the first and the second address values, and for calculating a third address value containing the characteristic value of the network, and for assigning ~~this~~ the third address value to the device if ~~the~~ a reaction following a communication request sent by the ~~communication~~ means of bidirectional communication to a device having the third address value indicates that ~~this~~ the third address value is not assigned to any terminal of the network."
- The last two lines of claim 7 must be further amended because the limitation "any terminal of the network" lacks antecedent basis.
- Please amend claim 8 as follows:

  "The electronic device as claimed in claim 7, ~~wherein it comprises~~ further

comprising:

a means of sending a communication request to [[a]] said device having the third address value[[,]]; and

a means of detecting a response to said communication request, the ~~detection~~ detecting of a response signifying that the third address value is not assigned to a device of the network."

- Line 5 of claim 8 must be further amended because the limitation "a device of the network" lacks antecedent basis.
- Please amend claim 9 as follows:

  "The electronic device as claimed in claim 7 wherein the ~~calculation~~ means for determining and for calculating and for assigning, concatenates the characteristic value of the network previously determined with a specific value, ~~this~~ the specific value being at [[its]] a maximum on a first calculation[[,]]; and the ~~calculation~~ means for determining and for calculating and for assigning, ~~subtracting~~ subtracts one unit from ~~this~~ the specific value to calculate a new third address value when it turns out that the preceding calculated address value is already assigned to a terminal."
- Line 5 of claim 9 must be further amended because the limitation "unit" is indefinite and lacks antecedent basis.
- Line 6 of claim 9 must be further amended because the limitation "the preceding calculated address value" lacks antecedent basis.

- Lines 6-7 of claim 9 must be further amended because the limitation “a terminal” has ambiguous antecedent basis.
- Please amend claim 10 as follows:

  “The electronic device as claimed in claim 7, ~~wherein it comprises~~ further comprising:

  a means for changing the value of the least significant bit of the characteristic value of the network, the new characteristic value being reduced by this bit, said means for changing being triggered when it turns out that all third values calculated from the preceding characteristic value of the network are already assigned to a terminal.”
- Line 3 of claim 10 must be further amended because the limitation “the value of the least significant bit” lacks antecedent basis.
- Lines 3-4 of claim 10 must be further amended because the limitation “the new-characteristic value” lacks antecedent basis.
- Line 4 of claim 10 must be further amended because the limitation “this bit” lacks antecedent basis.
- Line 5 of claim 10 must be further amended because the limitation “all third values calculated” lacks antecedent basis.
- Line 5 of claim 10 must be further amended because the limitation “the preceding characteristic value” lacks antecedent basis.
- Line 6 of claim 10 must be further amended because the limitation “a terminal” has ambiguous antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 7-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101; they are not a series of steps or acts to be a process; and they are not a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims **1-3 and 5-9** are rejected under 35 U.S.C. 102(b) as being anticipated by **Cole et al.** (US Pat. No. 5854901) (hereinafter referred to as “Cole”).

With regard to claim **1**, Cole teaches:

A procedure for generating an address value for a communication terminal (24 in Figure 1) linked to a network (20), the procedure being wherein it comprises the following steps, at terminal level:

a) scanning of messages sent over the network (column 3, lines 31-43) and reception of a message interchanged between two terminals already configured (i.e., a DNS request is unicast by a host 14 to a DNS server; column 3, lines 31-43) comprising a pair of first and second address values (i.e., an IP packet header includes a broadcast DNS server address 40 and an IP source address 36; column 3, lines 21-30),

b) determination of a characteristic value of the network, said value being contained in the first and the second address values (i.e., the source address may contain the value "198.1.1.10". The fact that one proposed IP address is "198.1.1.9", implies determination of "198.1.1" as a characteristic value of the network, "198.1.1" being contained in the source and the destination address values; column 5, lines 42-56),

c) calculation of a third address value containing the characteristic value of the network (i.e., an address generator 46 generates a proposed IP address "SEED -1=>198.1.1.9"; column 5, lines 42-56),

d) assignment of the third address value to the terminal if this value is not already assigned to another terminal (i.e., if no device responds to an ARP request, the proposed IP address is assigned to the router in step 74; Figure 4; column 5, lines 26-32; column 3, lines 55-64).

With regard to claim **2**, Cole teaches:

Procedure for generating an address value as claimed in claim 1, wherein if the terminal deduces from the call captured on the communication network that the second address is available (i.e., if the source address is considered to be the second address, then the terminal does not deduce that the second address is available), then the calculation step consists in giving to the third value the value of the second value (i.e., because the terminal does not deduce that the second address is available, the source address is not given to the third value).

With regard to claim **3**, Cole teaches:

The procedure for generating an address value as claimed in claim 1, wherein the third value is calculated by concatenating the characteristic value of the network with a specific value (i.e., the generation of the proposed address "198.1.1.9" is equivalent to concatenating the characteristic value "198.1.1" with the specific value “9”; column 5, lines 41-56), this specific value being maximum on the first calculation (i.e., among the proposed addresses generated using "SEED -1", the specific value “9” is maximum), this specific value being reduced by one unit each time that the preceding third value calculated is found to be assigned to another terminal (i.e., if a device on the network segment 20 has already assigned the IP address "198.1.1.9", the router 24 generates another proposed address by decrementing the seed again "SEED - 2=>198.1.1.8").

With regard to claim **5**, Cole teaches:

The procedure for generating an address value as claimed in claim 1, wherein the assignment step comprises a step for sending a communication request to a terminal having the third address value (i.e., router 24 sends ARP request 28 out on the network to determine whether the proposed IP address is assigned to another device; column 3, lines 44-64), and a step for awaiting reception of a response, the reception of a response signifying that the third address value is not available (i.e., if the ARP request is answered, the proposed IP address is already assigned to another device on the network segment 20; column 3, lines 44-64).

With regard to claim **6**, Cole teaches:

The procedure for generating an address value as claimed in claim 1, wherein the assignment step comprises a step for sending a communication request to a terminal having the third address value (i.e., router 24 sends ARP request 28 out on the network to determine whether the proposed IP address is assigned to another device; column 3, lines 44-64), and a step for receiving a message sent by the network following said request indicating that the third address value is not assigned to a terminal of the network, the step for receiving such a message triggering the assignment of the third address value to the terminal (i.e., if the ARP request 28 comes back unanswered, router 24 concludes that the proposed IP address is available, and assigns itself the IP address; column 3, lines 55-64).

With regard to claim **7**, Cole teaches:

An electronic device (24 in Figure 1) designed to be connected to a communication network (20), comprising

a means of bidirectional communication with said network (i.e., the line between 24 and 20 in Figure 1; column 2, lines 61-67), wherein it comprises

a means of receiving all the messages sent over the network (i.e., router 24 listens for all DNS requests; column 3, lines 31-43) in order to select a message interchanged between two terminals already configured (i.e., a DNS request unicast by the host 14 to a DNS server is identified by the router 24),

said message comprising a first and a second address value (i.e., an IP packet header includes a broadcast DNS server address 40 and an IP source address 36; column 3, lines 21-30),

a means for determining a characteristic value of the network which constitutes a part of the first and the second address values (i.e., address generator module 46 in router 24 uses the source address 36 as a seed for generating proposed IP addresses. The source address may contain the value "198.1.1.10". The fact that one proposed IP address is "198.1.1.9", implies determination of "198.1.1" as a characteristic value of the network, "198.1.1" being contained in the source and the destination address values; column 5, lines 42-56),

and for calculating a third address value containing the characteristic value of the network (i.e., address generator 46 generates a proposed IP address "SEED - 1=>198.1.1.9"; column 5, lines 42-56),

and for assigning this third address value to the device if the reaction following a communication request sent by the communication means to a device having the third address indicates that this third address value is not assigned to any terminal of the network (i.e., if no device responds to an ARP request from router 24, router 24 assigns itself the proposed IP address; Figure 4; column 5, lines 26-32; column 3, lines 55-64).

With regard to claim **8**, Cole teaches:

The electronic device as claimed in claim 7, wherein it comprises a means of sending a communication request to a device having the third address value (i.e., router 24 sends ARP request 28 out on the network to determine whether the proposed IP address is assigned to another device; column 3, lines 44-64), and a means of detecting a response to said request, the detection of a response signifying that the third address value is not assigned to a device of the network (i.e., if the ARP request 28 of router 24 comes back to router 24 unanswered, router 24 concludes that the proposed IP address is available, and assigns itself the IP address; column 3, lines 55-64).

With regard to claim **9**, Cole teaches:

The electronic device as claimed in claim 7 wherein the calculation means concatenates the characteristic value of the network previously determined with a specific value (i.e., the generation of the proposed address "198.1.1.9" by address generator module 46 is equivalent to concatenating the characteristic value "198.1.1" with the specific value “9”; column 5, lines 41-56), this specific value being at its

maximum on a first calculation (i.e., among the proposed addresses generated by address generator module 46 using "SEED -1", the specific value “9” is maximum), the calculation means subtracting one unit from this specific value to calculate a new third address value when it turns out that the preceding calculated address value is already assigned to a terminal (i.e., if a device on the network segment 20 has already assigned the IP address "198.1.1.9", the router 24 generates another proposed address by decrementing the seed again "SEED -2=>198.1.1.8").

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims **4 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole in view of Feldmeier et al. (US Pub. No. 20020032681) (hereinafter referred to as “Feldmeier”).

With regard to claim **4**, Cole teaches the claimed subject matter as discussed above except: a step consisting in changing the value of the least significant bit of the characteristic value of the network, the new-characteristic value being reduced by this bit, said step being triggered when all the third values calculated from the preceding characteristic value of the network are already assigned to a terminal. However, Feldmeier teaches: a step consisting in changing the value of the least significant bit of

the characteristic value of the network, the new-characteristic value being reduced by this bit, said step being triggered when all the third values calculated from the preceding characteristic value of the network are already assigned to a terminal (i.e., an address search technique uses a mask "11XXX", such that the characteristic value is "11". If there is no match, the least significant 1 of the mask is replaced with a 0 to form the new mask "10XXX", *in order to accelerate address searching*; [0017], [0016], [0020]; 6 in Figure 4). Based on Cole in view of Feldmeier, it would have been obvious to a person having ordinary skill in the art at the time the Applicant's invention was made, to combine the teaching of Feldmeier with the subject matter as taught by Cole, in order to accelerate address searching.

With regard to claim **10**, Cole teaches the claimed subject matter as discussed above except: a means for changing the value of the least significant bit of the characteristic value of the network, the new characteristic value being reduced by this bit, said means being triggered when it turns out that all third values calculated from the preceding characteristic value of the network are already assigned to a terminal. However, Feldmeier teaches: a means for changing the value of the least significant bit of the characteristic value of the network, the new characteristic value being reduced by this bit, said means being triggered when it turns out that all third values calculated from the preceding characteristic value of the network are already assigned to a terminal (i.e., an address search technique uses a mask "11XXX", such that the characteristic value is "11". If there is no match, the technique replaces the least significant 1 of the

mask with a 0 to form the new mask "10XXX", *in order to accelerate address searching*; [0017], [0016], [0020]; 6 in Figure 4). Based on Cole in view of Feldmeier, it would have been obvious to a person having ordinary skill in the art at the time the Applicant's invention was made, to combine the teaching of Feldmeier with the subject matter as taught by Cole, in order to accelerate address searching.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Isom whose telephone number is (571)270-7203. The examiner can normally be reached on Monday through Friday, 9:30 a.m. to 6:00 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Hwang can be reached on (571)272-4036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. I./
Examiner, Art Unit 2447
2/14/2009

/Joon H. Hwang/
Supervisory Patent Examiner, Art Unit 2447